

CLAIMS

We claim:

1. A motor stator comprised of a lamination body in which conductive layers and insulating layers are laminated alternately, characterized in that a plurality of sets of coils of wound conductive patterns are formed on each conductive layer and said coils of conductive layers adjoined via said insulating layers are connected to each other via through holes formed on said insulating layers.
- 10 2. The stator according to claim 1 characterized in that a drive circuit of said coil is provided in at least one of said conductive layers.
- 15 3. The stator according to claim 1 or 2 characterized in that said conductive layer is formed on an insulating substrate as said insulating layer.
4. The stator according to any one of claims 1 to 3 characterized in that each winding of the coils of the conductive layers adjoining each other via said insulating layers are connected to each other via said through holes.
- 20 5. The stator according to claim 1 characterized in that said conductive pattern is formed in a planar direction of the conductive layer.
6. A motor stator comprised of a lamination body in which conductive layers and insulating layers are laminated alternately, characterized in that a plurality of sets of coils of wound conductive patterns are formed on the conductive layer, said coils linked via said insulating layers are connected to each other via the through

holes formed on said insulating layers, and said coils are formed in a layered direction of a plurality of conductive layers.

7. A motor comprising the stator according to any one of claims 1 to 5 and a 5 rotor comprising a permanent magnet.

8. A coil structure in which a plurality of conductive layers and insulating layers are laminated alternately, coils with wound conductive patterns are formed on each conductive layer, the coils of the conductive layers adjoined via said 10 insulating layers are electrically connected with one another via the through holes formed in said insulating layers, the coil structure being characterized in that said through hole is formed for each wind of said conductive pattern of said coil, which, via said through hole, is electrically connected with each wind of the conductive pattern of the coil of the conductive layers adjoined via said insulating layers.

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9. The coil structure according to claim 8 characterized in that said conductive pattern is formed in a planar direction of said conductive layer.

10. A coil structure comprised of a lamination body in which conductive layers 20 and insulating layers are laminated alternately, characterized in that a plurality of sets of coils of wound conductive patterns are formed on the conductive layer, said coils linked via said insulating layers are connected to each other via the through holes formed on said insulating layers, and said coils are formed in a layered direction of a plurality of conductive layers.

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